

IN THE CLAIMS:

1. (Currently Amended) A computer-implemented method of representing and manipulating a diagram on a browser, the diagram including a representation of a plurality of interconnected business objects, the computer-implemented method comprising the steps of:

displaying at least a portion of the diagram in an active area of the browser, the active area being located in a first portion of the browser;

displaying a diagram overview in a second portion of the browser, the diagram overview including a representation of an entirety of the diagram and indicating a currently displayed portion of the diagram that is displayed in the active area;

enabling a selection of a canvas node of a plurality of canvas nodes, each of the plurality of canvas nodes being configured to enable a respectively different associated canvas action to be taken on any of the business objects of the diagram displayed in the active area of the browser, **selection of at least some of the canvas actions causing at least one target indicator to be shown, the at least one target indicator indicating where the selected canvas action may be taken in the currently displayed portion of the diagram,** each business object representing a business process and including business information and associated business logic for acting upon the business information;

enabling a selection of at least one of the plurality of business objects of the diagram displayed in the active area;

providing contextual information regarding the diagram displayed in the active area in a third portion of the browser;

providing hierarchical information regarding the selected at least one of the plurality of business objects in a fourth portion of the browser;

carrying out the canvas action associated with the selected canvas mode on the selected at least one of the plurality of business objects;

determining whether the carried out canvas action is solely a diagram navigation event that does not change the business process represented by the selected at least one business object or whether the carried out canvas action results in a change the business process represented by the selected at least one business object, and if the selected canvas action is determined to change the business process represented by the selected at least one business object, changing at least one of the business information and the business logic of the selected at least one business object on which the selected canvas action was carried out, and

refreshing at least the active area of the browser to display a revised portion of the diagram, the revised portion of the diagram incorporating any changes to the diagram as a result of carrying out the selected canvas action on the selected at least one of the plurality of business objects.

2. **(Original)** The computer-implemented method of claim 1, further comprising the step of enabling the displayed portion of the diagram to be panned left, right, up or down through activation of pan controls disposed on each side of the active area of the browser.

3. **(Original)** The computer-implemented method of claim 1, further comprising the step of enabling the active area of the browser to display a next adjacent quadrant of the displayed diagram upon detecting a predetermined user action.

4. **(Original)** The computer-implemented method of claim 1, wherein at least one of the business objects includes at least one hierarchically lower business object coupled thereto in a parent-child relationship.

5. **(Original)** The computer-implemented method of claim 4, further comprising the step of displaying the at least one hierarchically lower business object within the active area.

6. **(Original)** The computer-implemented method of claim 1, further comprising a step of updating the contextual information displayed within the third portion of the browser to reflect the portion of the diagram currently displayed in the active area of the browser.

7. **(Previously Presented)** The computer-implemented method of claim 1, wherein each of the plurality of canvas nodes enables a respectively different canvas action selected from add node, remove node, update node, move node, group nodes, view source of node, insert node, duplicate node, display node edges, connect nodes, refocus, view information about a node, define properties of a node, edit properties of a node and view node hierarchy.

8. **(Original)** The computer-implemented method of claim 1, further including a step of refreshing the second portion of the browser to update the diagram overview to reflect any changes to the diagram overview as a result of carrying out the selected canvas action of the selected at least one of the plurality of business objects.

9. **(Currently Amended)** A machine-readable medium having data stored thereon representing sequences of instructions which, when executed by computing device, causes said computing device to represent and enable manipulation of a diagram on a browser, the diagram including a representation of a plurality of interconnected business objects, by performing the steps of:

displaying at least a portion of the diagram in an active area of the browser, the active area being located in a first portion of the browser;

displaying a diagram overview in a second portion of the browser, the diagram overview including a representation of an entirety of the diagram and indicating a currently displayed portion of the diagram that is displayed in the active area;

enabling a selection of a canvas mode of a plurality of canvas modes, each of the plurality of canvas modes being configured to enable a respectively different associated canvas action to be taken on any of the business objects of the diagram displayed in the active area of the browser, selection of at least some of the canvas actions causing at least one target indicator to be shown, the at least one target indicator indicating where the selected canvas action may be taken in the currently displayed portion of the diagram, each business object representing a business process and including business information and associated business logic for acting upon the business information;

enabling a selection of at least one of the plurality of business objects of the diagram displayed in the active area;

providing contextual information regarding the diagram displayed in the active area in a third portion of the browser;

providing hierarchical information regarding the selected at least one of the plurality of business objects in a fourth portion of the browser;

carrying out the canvas action associated with the selected canvas mode on the selected at least one of the plurality of business objects;

determining whether the carried out canvas action is solely a diagram navigation event that does not change the business process represented by the selected at least one business object or whether the carried out canvas action results in a change the business process represented by the selected at least one business object, and if the selected canvas action is determined to change the business process represented by the selected at least one business object, changing at least one of the business information and the business logic of the selected at least one business object on which the selected canvas action was carried out, and

refreshing at least the active area of the browser to display a revised portion of the diagram, the revised portion of the diagram incorporating any changes to the diagram as a result of carrying out the selected canvas action on the selected at least one of the plurality of business objects.

10. **(Original)** The medium of claim 9, further comprising the step of enabling the displayed portion of the diagram to be panned left, right, up or down through activation of pan controls disposed on each side of the active area of the browser.

11. **(Original)** The medium of claim 9, further comprising the step of enabling the active area of the browser to display a next adjacent quadrant of the displayed diagram upon detecting a predetermined user action.

12. **(Original)** The medium of claim 9, wherein at least one of the business objects includes at least one hierarchically lower business object coupled thereto in a parent-child relationship.

13. **(Original)** The medium of claim 12, further comprising the step of displaying the at least one hierarchically lower business object within the active area.

14. **(Original)** The medium of claim 9, further comprising a step of updating the contextual information displayed within the third portion of the browser to reflect the portion of the diagram currently displayed in the active area of the browser.

15. **(Currently Amended)** The medium of claim 9, wherein each of the plurality of canvas nodes enables a respectively different canvas action selected from add node, remove node, update node, move node, group nodes, view source of node, insert node, duplicate node, display node edges, connect nodes, refocus, view information about a node, define properties of a node, edit properties of a node and view node hierarchy.

16. **(Original)** The medium of claim 9, further including a step of refreshing the second portion of the browser to update the diagram overview to reflect any changes to the diagram overview as a result of carrying out the selected canvas action on the selected at least one of the plurality of business objects.

17. **(Currently Amended)** A computer system suitable for representing and enabling manipulation of a diagram on a browser, the diagram including a representation of a plurality of interconnected business objects, comprising:

at least one processor;

at least one data storage device coupled to the at least one processor;

a plurality of processes spawned by said at least one processor, the processes including processing logic for:

displaying at least a portion of the diagram in an active area of the browser, the active area being located in a first portion of the browser;

displaying a diagram overview in a second portion of the browser, the diagram overview including a representation of an entirety of the diagram and indicating a currently displayed portion of the diagram that is displayed in the active area;

enabling a selection of a canvas mode of a plurality of canvas modes, each of the plurality of canvas modes being configured to enable a respectively different associated canvas action to be taken on any of the business objects of the diagram displayed in the active area of the browser, selection of at least some of the canvas actions causing at least one target indicator to be shown, the at least one target indicator indicating where the selected canvas action may be taken in the currently displayed portion of the diagram, each business object representing a business process and including business information and associated business logic for acting upon the business information;

enabling a selection of at least one of the plurality of business objects of the diagram displayed in the active area;

providing contextual information regarding the diagram displayed in the active area in a third portion of the browser;

providing hierarchical information regarding the selected at least one of the plurality of business objects in a fourth portion of the browser;

carrying out the canvas action associated with the selected canvas mode on the selected at least one of the plurality of business objects;

determining whether the carried out canvas action is solely a diagram navigation event that does not change the business process represented by the selected at least one business object or whether the carried out canvas action results in a change the business process represented by

the selected at least one business object, and if the selected canvas action is determined to change the business process represented by the selected at least one business object, changing at least one of the business information and the business logic of the selected at least one business object on which the selected canvas action was carried out, and

refreshing at least the active area of the browser to display a revised portion of the diagram, the revised portion of the diagram incorporating any changes to the diagram as a result of carrying out the selected canvas action on the selected at least one of the plurality of business objects.

18. **(Original)** The computer system of claim 17, further comprising the step of enabling the displayed portion of the diagram to be panned left, right, up or down through activation of pan controls disposed on each side of the active area of the browser.

19. **(Original)** The computer system of claim 17, further comprising the step of enabling the active area of the browser to display a next adjacent quadrant of the displayed diagram upon detecting a predetermined user action.

20. **(Original)** The computer system of claim 19, wherein at least one of the business objects includes at least one hierarchically lower business object coupled thereto in a parent-child relationship.

21. **(Original)** The computer system of claim 20, further comprising the step of displaying the at least one hierarchically lower business object within the active area.

22. **(Original)** The computer system of claim 17, further comprising a step of updating the contextual information displayed within the third portion of the browser to reflect the portion of the diagram currently displayed in the active area of the browser.

23. (Currently Amended) The computer system of claim 17, wherein each of the plurality of canvas modes enables a respectively different canvas action includes at least one of selected from add node, remove node, update node, move node, group nodes, view source of node, insert node, duplicate node, display node edges, connect nodes, refocus, view information about a node, define properties of a node, edit properties of a node and view node hierarchy.

24. (Original) The computer system of claim 17, further including a step of refreshing the second portion of the browser to update the diagram overview to reflect any changes to the diagram overview as a result of carrying out the selected canvas action on the selected at least one of the plurality of business objects.

25. (Currently Amended) A computer implemented method for a user to remotely and graphically manipulate representations of business objects on a browser of a thin client coupled to a server over a network, the method comprising:

displaying a diagram that includes a representation of a plurality of interconnected business objects on the browser, each business object including business information and associated business logic for acting upon the business information;

detecting a selection of one of a plurality of canvas modes by the user, each of the plurality of canvas modes being configured to enable a respectively different associated canvas action to be taken on any of the business objects of the diagram displayed on the browser;

displaying at least one target indicator in the diagram, the displayed at least one target indicator indicating where the canvas action associated with the selected canvas mode may be taken;

detecting a canvas action associated with the selected canvas mode, the detected canvas action being triggered by the user at one of the displayed target indicators on the displayed diagram on the browser;

submitting a request associated with the triggered canvas action to a controller, the controller being configured to interface between the thin client and a business object controlling application running on the server, the controller being configured to control page flow between the application and the browser on the thin client depending upon the detected canvas action;

changing the state of the business object controlling application on the server according to the detected canvas action and correspondingly changing at least one of the plurality of business objects by changing at least one of its business information and its business logic;

receiving an answer from the controller in response to the submitted request, the received answer causing the browser to refresh its display of the diagram so as to reflect at least one of the changed state of the business object controlling application, the changed business information and the changed business object.

26. **(Original)** The computer-implemented method of claim 25, wherein the business controlling application is coupled to a database that stores the data associated with the plurality of business objects and wherein the method further includes a step of changing the data stored within the database to reflect the changed state of the business object controlling application.

27. **(Original)** The computer-implemented method of claim 25, wherein the answer from the controller includes a URL of a Web page.

28. **(Currently Amended)** A machine-readable medium having data stored thereon representing sequences of instructions which, when executed by computing device, causes said

computing device to enable a user to remotely and graphically manipulate representations of business objects on a browser of a thin client coupled to a server over a network, by performing the steps of:

displaying a diagram that includes a representation of a plurality of interconnected business objects on the browser, each business object including business information and associated business logic for acting upon the business information;

detecting a selection of one of a plurality of canvas modes by the user, each of the plurality of canvas modes being configured to enable a respectively different associated canvas action to be taken on any of the business objects of the diagram displayed on the browser;

displaying at least one target indicator in the diagram, the displayed at least one target indicator indicating where the canvas action associated with the selected canvas mode may be taken;

detecting a canvas action associated with the selected canvas mode, **the detected canvas action being** triggered by the user **at one of the displayed target indicators** on the displayed diagram on the browser;

submitting a request associated with the triggered canvas action to a controller, the controller being configured to interface between the thin client and a business object controlling application running on the server, the controller being configured to control page flow between the application and the browser on the thin client depending upon the detected canvas action;

changing the state of the business object controlling application on the server according to the detected canvas action and correspondingly changing at least one of the plurality of business objects by changing at least one of its business information and its business logic;

receiving an answer from the controller in response to the submitted request, the received answer causing the browser to refresh its display of the diagram so as to reflect at least one of the changed state of the business object controlling application, the changed business information and the changed business object.

29. **(Original)** The medium of claim 28, wherein the business controlling application is coupled to a database that stores the data associated with the plurality of business objects and wherein the method further includes a step of changing the data stored within the database to reflect the changed state of the business object controlling application.

30. **(Original)** The medium of claim 28, wherein the answer from the controller includes a URL of a Web page.

31. **(Currently Amended)** A computer system enabling a user to remotely and graphically manipulate representations of business objects on a browser of a thin client coupled to a server over a network, the computer system comprising:

at least one processor;

at least one data storage device coupled to the at least one processor;

a plurality of processes spawned by said at least one processor, the processes including processing logic for:

displaying a diagram that includes a representation of a plurality of interconnected business objects on the browser, each business object including business information and associated business logic for acting upon the business information;

detecting a selection of one of a plurality of canvas modes by the user, each of the plurality of canvas modes being configured to enable a respectively different associated canvas action to be taken on any of the business objects of the diagram displayed on the browser;

displaying at least one target indicator in the diagram, the displayed at least one target indicator indicating where the canvas action associated with the selected canvas mode may be taken;

detecting a canvas action associated with the selected canvas mode, the detected canvas action being triggered by the user at one of the displayed target indicators on the displayed diagram on the browser;

submitting a request associated with the triggered canvas action to a controller, the controller being configured to interface between the thin client and a business object controlling application running on the server, the controller being configured to control page flow between the application and the browser on the thin client depending upon the detected canvas action;

changing the state of the business object controlling application on the server according to the detected canvas action and correspondingly changing at least one of the plurality of business objects by changing at least one of its business information and its business logic;

receiving an answer from the controller in response to the submitted request, the received answer causing the browser to refresh its display of the diagram so as to reflect at least one of the changed state of the business object controlling application, the changed business information and the changed business object.

32. (Original) The computer system of claim 31, wherein the business controlling application is coupled to a database that stores the data associated with the plurality of business

objects and wherein the method further includes a step of changing the data stored within the database to reflect the changed state of the business object controlling application.

33. **(Original)** The computer system of claim 31, wherein the answer from the controller includes a URL of a Web page.